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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,507	12/14/2001	Naoki Tsukiji	214144US8	3570

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/014,507

Applicant(s)

TSUKIJI ET AL.

Examiner

Laura M Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 17-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

**This Office Action is in response to the Election made in Paper No. 8 on 6/18/03.**

#### *Election/Restrictions*

Claims 17-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani et al ('352).

In reference to claim 1, Mizutani et al teaches a method comprising:

Forming a plurality of semiconductor elements on a wafer such that two adjacent elements define a separation boundary (Col.3, lines: 49-60 and Col.s 9-10 lines: 40-25);  
and

Providing an integral semiconductor structure across the separation boundary such that the structure is common to the two elements formed on the wafer (Col.6, lines: 49-60 see also Col.s 10-11, lines: 25-10).

In reference to claim 2, Mizutani et al teaches wherein the forming a plurality of elements comprises forming a plurality of semiconductor laser elements such that two adjacent laser elements define a separation boundary (Col.3, lines: 49-60 and Col.s 9-10 lines: 40-25).

In reference to claim 3, Mizutani et al teaches wherein the forming the plurality of laser elements on the wafer such that the separation boundary is a light emitting facet for each of the two laser elements (Col.s 10-11, lines: 25-10).

In reference to claim 4, Mizutani et al teaches wherein providing an integral structure comprises forming a diffraction grating across the separation boundary such that the diffraction grating is common to the two laser elements formed on the wafer (Col.6, lines: 49-60).

In reference to claim 5, Mizutani et al teaches wherein forming the diffraction grating comprises forming one of a DFB and a DBR (Col.1, lines: 35-50 and Col.14, lines: 30-35).

In reference to claim 6, Mizutani et al teaches wherein providing a structure further comprises forming a light waveguide (Col.10, lines: 55-65).

In reference to claim 7, Mizutani et al teaches further comprising cleaving the two elements at the separation boundary (Col.11, lines: 1-10).

In reference to claim 8, Mizutani et al teaches further comprising forming a reflective coating on a cleavage plane of a discrete element formed by cleaving (Col.s 14-15, lines: 65-5).

In reference to claim 9, Mizutani et al teaches wherein forming a plurality of laser elements comprises forming elements on the wafer such that the separation boundary is a light reflecting facet for each of the laser elements (Col.s 10-11, lines: 25-10).

In reference to claim 10, Mizutani et al teaches wherein the structure comprises forming a diffraction grating across the separation boundary such that the grating is common to the two laser elements formed on the wafer (Col.6, lines: 49-60).

In reference to claim 11, Mizutani et al teaches wherein forming the diffraction grating comprises one of a DFB and a DBR(Col.1, lines: 35-50 and Col.14, lines: 30-35).

In reference to claim 12, Mizutani et al teaches wherein providing an integral structure further comprises forming a light waveguide (Col.10, lines: 55-65)..

In reference to claim 13, Mizutani et al teaches further comprising cleaving the two adjacent laser elements at the separation boundary(Col.11, lines: 1-10)..

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In reference to claim 14, Mizutani et al teaches further comprising forming a reflective coating on the cleavage plane of a discrete laser element formed by the cleaving (Col.s 14-15, lines: 65-5).

In reference to claim 15, Mizutani et al teaches wherein the providing the structure comprises forming one of a light modulator and a light amplifier (Col.16, lines: 50-55).

In reference to claim 16, Mizutani et al teaches further comprising cleaving the two adjacent elements at the separation boundary (Col.11, lines: 1-10).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (703) 308-4940. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
CARL WHITEHEAD, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

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